Use Case 1: Display Screening Tickets Sold Capacity

Name:

Display Screening Tickets Sold Capacity

Description:

Display the scheduled **times** for **movie screening** in a **day** and which **screen** they are being shown on as well as the **number of tickets sold** for each and the **capacity of the screens**

Actors:

Cinema staff

Triggers:

The use case is triggered by cinema staff who wants to see the display of the movie screenings (timeslot and screen), the number of tickets sold, and the capacity of each screen on a day when he/she is scheduling, rescheduling, canceling screenings or selling tickets.

Preconditions:

The movie screenings (screen and timeslot) that will be shown for a day must have already been scheduled in the system.

Postconditions:

After the use case is completed, the movie screenings (screen and timeslot), the number of tickets sold for each movie, and the capacity of screens on a requested day will be displayed.

Course of events:

Basic course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The system displays all movie screenings and the number of tickets sold as well as the capacity of screens on the requested day.

Extension Points:

None

Inclusion:

None

Use Case 2: Schedule Movie Screening

Name:

Schedule movie screening

Description:

This use case covers **scheduling what movies** are about to be shown and their shown **date**, **timeslot (start time and duration)** as well as **screen**.

Actors:

Cinema staff

Triggers:

The use case is triggered by cinema staff who decides what movies are about to be shown and their shown **date**, **timeslot** as well as **screen**.

Preconditions:

None

Postconditions:

After the use case is completed, the system will record what **movies** will be shown on which **day**, and their screening details **(timeslot and screen)**.

Course of events:

Basic course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screen".

2. The user enters the **name** of a single movie, **start time**, **duration**, and which **screen** they will be shown at one time.

3. The system remembers the new screening (timeslot and screen) schedule for the movies that are about to be shown on the requested day and updates the display.

Exceptional course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screen".

2. The user enters the **name** of a single movie, **start time**, **duration**, and which **screen** they will be shown at one time.

3. The system warns the user that the **newly scheduled movie screening** (screen or timeslot which contains start time and duration) **overlaps** the **existing movie screening** on the requested day in the system. The system returns to step 2.

Extension Points:

None

Inclusion:

Display Screening, Tickets Sold, Capacity

Use Case 3: Reschedule Movie Screening

Name:

Reschedule movie screening

Description:

This use case covers **changing** the **start time** (duration for a movie is fixed) or **screen** of a movie that will be shown **on a day**.

Actors:

Cinema staff

Triggers:

The use case is triggered by the cinema staff who wants to change when or which screen will show the expected movie on a day.

Preconditions:

The requested movie screening (timeslot and screen) that will be changed must already **exist** in the system.

Postconditions:

After the use case is completed, the system will move (change) the selected movie screening to another available screening with a different timeslot or screen on the same day. Then the timeslot which starts from the previous start time and lasts for the duration of the movie on that screen should be available now.

Course of events:

Basic course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user moves the selected movie screening to another movie screening with a different timeslot (start time and duration) on the same day or screen.

5. The system asks the user to confirm.

6. The user selects yes.

7. The system records the new screening schedule for that movie and updates the display.

8. The user selects no.

9. The system returns to step 4.

Alternate course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user tries to move the selected movie screening to another movie screening with a different timeslot (start time and duration) or screen on a different day.

5. The system warns the user that he can only reschedule movie screenings on the same day, and if he wants to reschedule on a different day, he should cancel it and schedule it again, and returns to step 2.

Exceptional course of events (1):

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user tries to move the selected movie screening to another movie screening with a different timeslot or screen.

5. The system warns the user that the **newly changed movie screening** (screen or timeslot which contains start time and duration) **overlaps** the **existing movie screening** on the requested day in the system. The system returns to step 2.

Exceptional course of events (2):

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user tries to move the selected movie screening to another movie screening with a different timeslot (screen can be either changed or remain the same).

5. The system warns the user that there are tickets that have been sold for that movie screening so that the timeslot of the requested movie screening cannot be changed, and returns to step 2.

Extension Points:

None

Inclusion:

Display Screening, Tickets Sold, Capacity

Use Case 4: Cancel Movie Screening

Name:

Cancel Movie Screening

Description:

This use case covers **removing** an existing movie screening from the system schedule.

Actors:

Cinema staff

Triggers:

The use case is triggered by cinema staff who intends to **cancel a movie screening** by removing this existing movie screening from the system schedule.

Preconditions:

The requested movie screening (screen and timeslot) that will be removed must already **exist** in the system.

Postconditions:

After the use case is completed, the system will **remove the movie screening** (timeslot and screen) from the system schedule. Then the timeslot which starts from the previous start time and lasts for the duration of the movie on that screen should be available now.

Course of events:

Basic course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user performs the cancel movie screening function.

5. The system asks the user to confirm.

6. The user selects yes.

7. The requested movie screening is removed from the system and the display will be updated.

8. The user selects no.

9. The system returns to step 2.

Exceptional course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens".

2. The user selects a movie screening from the display.

3. The system highlights the movie screening to indicate it is selected.

4. The user performs the cancel movie screening function.

5. The system warns the user that there are tickets that have been sold for that movie screening so that the requested movie screening cannot be canceled, and returns to step 2.

Extension Points:

None

Inclusion:

Display Screening, Tickets Sold, Capacity

Use Case 5: Sell Tickets

Name:

Sell Tickets

Description:

This use case covers selling several tickets for a particular movie screening on a day and changing the number of tickets sold for that movie.

Actors:

Cinema staff

Triggers:

The use case is triggered by a customer who intends to buy movie tickets for a particular movie screening on a day.

Preconditions:

The movie screening (screen and timeslot) for the tickets must already exist in the moive screening schedule.

Postconditions:

After the use case is completed, the number of tickets sold will be updated and display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screen.

Course of events:

Basic course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screen".

2. The system displays the existing movie screenings (timeslot and screen) and the capacity of screens on the requested day.

3. The user selects a movie screening from the display.

4. The system highlights the movie screening to indicate it is selected.

5. The user enters the number of tickets that he will buy, and selects the sell tickets funtion.

6. The system updates the display, especially updates the number of sold tickets for the requsted moive screening.

Alternate course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens" use case.

2. There are no available movie screening that have been scheduled yet on the requested date.

Exceptional course of events:

1. The user enters the date, and performs the "Display the scheduled times for movie screening in a day and which screen they are being shown on as well as the number of tickets sold for each and the capacity of the screens" use case.

2. The system displays all movie screenings (timeslot and screen) and the capacity of screens on the requested day.

3. The user selects the relevant movie screening from the display.

4. The system highlights the movie screening to indicate it is selected.

5. The user enters the number of tickets that he will buy, and selects the sell tickets funtion.

6. The system warns the user that there are **insufficient tickets** based on the **capacity of the screen** for that requested movie screening, and returns to step 2.

Extension Points:

None

Inclusion:

Display Screening, Tickets Sold, Capacity